

**MATERIAL SAFETY DATA SHEET**

DATE PRINTED: FEB 26, 2010  
 MSDS NO. NZRESIN000 OUTBOUND  
 Alumnia/Zirconia Resin Grinding Wheel

**SECTION 1. CHEMICAL PRODUCT/COMPANY INFO.**

PRODUCT NAME  
 Alumnia/Zirconia Resin Grinding Wheel  
 TRADE NAME  
 NorZon  
 MANUFACTURER(4)  
 Saint-Gobain Abrasives, Inc.  
 One New Bond Street  
 Worcester, MA, 01606  
 (508) 795-5000  
 EMERGENCY TELEPHONE #1  
 (508) 795-5000  
 SUPPLIER  
 Saint-Gobain Abrasives Canada, Inc.  
 PO Box 3008  
 Hamilton, Ont., Canada L8L 7Y5  
 (905)547-2551  
 PRODUCT USE  
 Various grinding, polishing, cutting and sanding tasks  
 REVISION DATE  
 2/01/2010  
 MSDS PRINT FORMAT  
 NORTONCAN  
 WHMIS HAZARD CLASS  
 D2B

**SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Aluminum Oxide, Non-fibrous	40.000- 50.000	1344-28-1
Calcium Oxide	1.000- 5.000	1305-78-8
Carbon Black	0.100- 1.000	1333-86-4
Cured PhenolFormaldehyde Resin	3.000- 20.000	9003-35-4
Fiberglass	1.000- 10.000	65997-17-3
Inorganic Fluorides **	2.000- 10.000	NA
Manganese Compounds(*) **	1.000- 5.000	NA
@Crystalline Silica, Quartz	0.001- 1.000	14808-60-7
Sodium Silicate	5.000- 15.000	1344-09-8
Sulfates & Sulfides **	1.000- 10.000	NA
Zinc Compound(*) **	1.000- 5.000	NA
Zirconium Oxide	30.000- 40.000	1314-23-4

\*\* SUBSTANCE IS A COMPOUND AND/OR MIXTURE

OTHER

(@) Actual grinding tests with wheels known to contain Crystalline Silica did not produce any detectable amount of respirable free Crystalline Silica. The grinding wheel may be comprised of only some of the above. (\*) This substance is regulated under Section 313

of the Emergency Planning and Community Right-to-Know Act of 1986 and the Canadian National Pollution Reduction Initiative (NPRI). The OSHA exposure limit represented in section 15 is for respirable dust and assumed to be worst case exposure to 100% crystalline silica; 10 mg/m3/(%silica+2)

DOMESTIC SUBSTANCE LIST

LD50/LC50

Values are not appropriate or available.

### **SECTION 3. PHYSICAL AND CHEMICAL PROPERTIES**

PRODUCT STATE

Solid

APPEARANCE & ODOR

Solid article. Odorless.

ODOR THRESHOLD (ppm)

NA

SPECIFIC GRAVITY

NA

VAPOR PRESSURE (mm Hg)

NA

VAPOR DENSITY (Air = 1.0)

NA

EVAPORATION RATE

NA

BOILING POINT

F C

pH FACTOR

NA

COEFFICIENT OF OIL/WATER

NA

### **SECTION 4. FIRE FIGHTING MEASURES**

FLASH POINT

F C NA

UPPER EXPLOSION LIMIT

NA

LOWER EXPLOSION LIMIT

NA

AUTO IGNITION TEMPERATURE

F C NA

EXTINGUISHING METHOD

Not Applicable

HAZARDOUS PRODUCTS/COMBUSTION

None.

OTHER FIRE + EXPLOSION HAZARDS

Not Applicable

### **SECTION 5. STABILITY AND REACTIVITY**

STABILITY

Stable.

INCOMPATIBILITIES

Avoid acids of all types with a pH < 4.0.

DECOMPOSITION

In use, dust and decomposing odors may be generated. In most cases, the material removed from the workplace will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.

For products containing Phenol and formaldehyde resin, thermal decomposition may produce trace amounts of phenol and formaldehyde.

For products containing inorganic fluorides, thermal decomposition may produce trace amounts of fluorides.

**SECTION 6. TOXICOLOGICAL INFORMATION**

INHALATION ACUTE EXPOSURE EFFECTS

Dust may be slightly irritating to eyes and respiratory tract at high concentrations.

INHALATION CHRONIC EXPOSURE EFFECTS

Chronic: May affect breathing capacity.

For products containing phenol/formaldehyde resin, dust generated from intended use may contain trace amounts of phenol and formaldehyde which under excessive exposure may cause skin sensitization and airway obstruction.

For products containing inorganic fluorides:

Excessive exposure to inorganic fluorides have been shown to increase bone density.

SKIN CONTACT ACUTE EXPOSURE EFFECTS

Some may experience skin irritation from dust.

EYE CONTACT ACUTE EXPOSURE EFFECTS

Dust may irritate eyes.

INGESTION ACUTE EXPOSURE EFFECTS

No known adverse effects, but ingestion not recommended.

EXPOSURE LIMITS/REGULATORY INFORMATION

SUBSTANCE DESCRIPTION	UNITS	OSHA	ACGIH	MOL
Aluminum Oxide, Non-fibrous	MG/M3	15.0000	10.0000	10.0000
Calcium Oxide	MG/M3	5.0000	2.0000	0.0000
Carbon Black	MG/M3	3.5000	3.5000	0.0000
Cured PhenolFormaldehyde Resin	PPM	0.0000	0.0000	0.0000
Fiberglass	FBR/CC	1.0000	0.0000	0.0000
Inorganic Fluorides	MG/M3	2.5000	2.5000	2.5000
Manganese Compounds(*)		0.0000	0.0000	0.0000
@Crystalline Silica, Quartz	MG/M3	0.1000	0.1000	0.0000

Sodium Silicate	MG/M3	15.0000	0.0000	0.0000
Sulfates & Sulfides	MG/M3	0.0000	0.0000	0.0000
Zinc Compound(*)		0.0000	0.0000	0.0000
Zirconium Oxide	MG/M3	5.0000	5.0000	5.0000

**LEGEND:****EXPOSURE LIMIT DESCRIPTIONS****CARCINOGENICITY**

For wheels containing fiberglass, fiber diameters are greater than 10um, therefore considered non-respirable.

Fiberglass - IARC-3

**SECTION 7. EXPOSURE CONTROLS/PERSONAL PROTECTION****VENTILATION PROTECTION**

Recommend using local exhaust ventilation when general ventilation is not keeping the airborne concentration below the TLV.

**RESPIRATORY PROTECTION**

Respirators are required when airborne contaminant levels exceed the TLV(s).

**EYE PROTECTION**

Always WEAR SAFETY GLASSES or some type of eye protection when grinding.

**OTHER PROTECTION**

Use of this product may create elevated sound levels. Hearing protection should be worn where required (see OSHA 29 CFR 1910.134 and other applicable regulations).

**HANDLING**

Always HANDLE AND STORE wheels in a CAREFUL manner.

Always VISUALLY INSPECT all wheels before mounting.

Always CHECK MACHINE SPEED against the established maximum safe operating speed MARKED ON THE WHEEL.

Always CHECK MOUNTING FLANGES for equal and correct diameter.

Always USE MOUNTING BLOTTERS.

Always be sure WORK REST is properly adjusted.

Always USE A SAFETY GUARD covering at least one-half of the grinding wheel.

Always allow NEWLY MOUNTED WHEELS to run at operating speed, with guard in place, for at least one minute before grinding.

Always TURN OFF COOLANT before stopping wheel to avoid creating an out-of-balance wheel.

**WASTE DISPOSAL**

Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

Products with listed flourides may have slightly soluble flouride swarf.

**SECTION 8. FIRST AID MEASURES****INHALATION**

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately .

**SKIN CONTACT**

Wash affected areas with soap and water. Obtain medical assistance.

**EYE CONTACT**

Wash with large amounts of water. Obtain first aid and medical assistance, if needed .

**INGESTION**

Call poison control center, hospital emergency room or physician immediately.

**SECTION 9. OTHER INFORMATION****MSDS DATA SOURCE**

SUPPLIER MSDS

**CREATED BY**

Kevin P. Fogarty

**CREATION DATE**

9/12/1994

**EMERGENCY TELEPHONE #2**

(508) 795-5000

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**KEY TO ABBREVIATIONS:**

EQ=Equal

LT=Less Than

GT=Greater Than

AP=Approximately

TR=TRace

ND=No Data available

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